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## CLAIMS

- 1. Network (30) of communication modules making it possible to access exterior transmission networks (20), characterized in that it is a hierarchical modular network, each pair of modules of different elaborateness (22, 23; 22, 25; 27, 23; 24, 25; 24, 22) being subject to a double upward and downward hierarchy.
- 10 2. Communication module for а network (30) according to Claim 1, characterized in that comprises means for associating it with at least one other module of the network, comprising a short-range internal interface configured so as to share the short-15 range medium with the interface of the said other module.
  - 3. Communication module according to Claim 2, in which there are provided means of optimization of association, for controlling the means of association, comprising manual means and automatic means.
  - 4. Communication module according to Claim 2, in which the short-range internal interface comprises an ergonomics stratum, an actuation stratum and a power stratum, the ergonomics stratum being configured so as to perform voice recognition and vocoding of speech.
  - 5. Module according to Claim 4, in which the information of the ergonomics and actuation strata of the short-range internal interface are multiplexed.
- 6. Module according to Claim 4, in which the ergonomics stratum of the short-range internal interface is associated with the actuation stratum of the short-range internal interface of an associated module.
- 7. Elementary communication module (23) intended to access at least one exterior transmission network (20), comprising ergonomic means, application means, power means and means of communication with the transmission network (20), characterized in that the means of communication comprise a short-range internal

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interface for communicating indirectly with the transmission network (20) by way of at least one more elaborate communication module (22, 24; 27).

- 8. Elementary module according to Claim 7, in which the ergonomic means are exclusively acoustic means.
- 9. Elementary module according to Claim 7, in which the application means consist exclusively of messaging means.
- 10 10. Elementary module according to Claim 7, which is a master transmitter module for voice control of the more elaborate module.
  - 11. Elementary module according to Claim 7, which is a peripheral secondary transmitter/receiver module of the more elaborate module.
  - 12. Portable communication module (22) intended to allow an elementary module (23), according to Claim 7, to access at least one exterior transmission network (20), comprising sight-typing ergonomic means and a
- long-distance communication interface for communication with the exterior transmission network.
  - 13. Portable module (22) according to Claim 12, which is a master and secondary transmitter/receiver module with regard to another elementary (23) or more elaborate (24) module to which it can be linked by the short-range internal communication interface.
  - 14. Fixed communication module (24) comprising ergonomic, application and communication means similar to those of the portable module (22) according to Claim
- 30 12, the application means comprising control means for personal and home-automation equipment and machines and there is provided a fixed communication interface.
  - 15. Fixed module (24) according to Claim 14, which is a master and secondary transmitter/receiver module
- with regard to another less elaborate module (22) to which it can be linked by the short-range internal communication interface.
  - 16. Module according to Claim 7, in which there are provided telephony application means configured so as,

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during communication and via a short-range link (1), to cooperate with telephony application means of another communication module of different elaborateness and to determine that a substitution of access is possible and/or desirable.

- 17. Module according to Claim 16, in which, having acquired the parameters of a communication of another module of different elaborateness with an exterior network, the telephony application means are configured so as to transmit in superposition with the said other module before substituting itself therefor.
- 18. Module according to Claim 17, in which the telephony application means are configured so as, in order to proceed with the substitution, to transmit in superposition under TD/CDMA.